

# **Environmental Impact Analysis Process (EIAP)**

**CADD/GIS Technology Center  
Army Engineer Research & Development Center  
Vicksburg, Mississippi  
<http://tsc.wes.army.mil>**

# Environmental Impact Analysis Process

## Project Scope –

- Develop web-based electronic environmental checklist (decision tree) for Environmental Impact Analysis Process (EIAP).
- Incorporate SDSFIE compliant GIS in EIAP.

## Center Project No. 01.040 – Use of GIS to Simplify EIAP

## Project Oversight – Environmental FWG

### Status -

Part 1 – Completed in June 2002.

Part 2 – Completed in July 2003.

Part 3 – Scheduled for development in Fiscal Year 2004.

## Project Website –

[http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01\\_040.htm](http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01_040.htm)



By Jim Weaver / courtesy USFWS

# Environmental Impact Analysis Process (EIAP)

- A method commonly used for ensuring that new construction projects and major maintenance activities are in compliance with National Environmental Policy Act (NEPA).
- Web enabled EIAP developed by CADD/GIS Technology Center can be used by all federal organizations to promote consistent compliance with NEPA.
- Originally based upon EIAP developed by Robins AFB, Georgia, and Patuxent River Naval Air Station, Maryland.

# Environmental Impact Analysis Process

## Environmental Checklist Organized by Environmental Pillars

<b>1</b>	<b>Conservation</b>
<b>2</b>	<b>Compliance</b>
<b>3</b>	<b>Pollution Prevention</b>
<b>4</b>	<b>Restoration</b>
<b>5</b>	<b>Other</b>

# Environmental Pillar No. 1 - Conservation

Section No.	Section Theme	Number of Questions
1	Soil Disturbance	19
2	Critical Area and Coastal Zone	4
3	Historic Preservation	5
4	Endangered Species	2
5	Land Use	2
6	Tree Clearing	3
7	Bird/Aircraft Strikes	3
8	Deer Auto Collision	3
9	Aesthetics	1

## Environmental Pillar No. 2 - Compliance

Section No.	Section Theme	No. of Questions
10	Storm Water and Wastewater	5
11	Pesticides	3
12	Hazardous Waste and Materials	4
13	Polychlorinated Biphenyls (PCB)	1
14	Air Quality (Emissions)	9
15	Drinking Water	5
16	Petroleum Systems	7
17	Oil Control	4
18	Groundwater Monitoring Wells	4
19	Asbestos	2
20	Lead	2

## **Environmental Pillar No. 3 – Pollution Prevention**

<b>Section No.</b>	<b>Section Theme</b>	<b>No. of Questions</b>
21	Solid Waste and Recycling	1
22	Noise	2

# Environmental Pillar No. 4 – Restoration

Section No.	Section Theme	No. of Questions
23	Capital Improvements	4
24	Installation Restoration	4



## Environmental Pillar No. 5 – Other

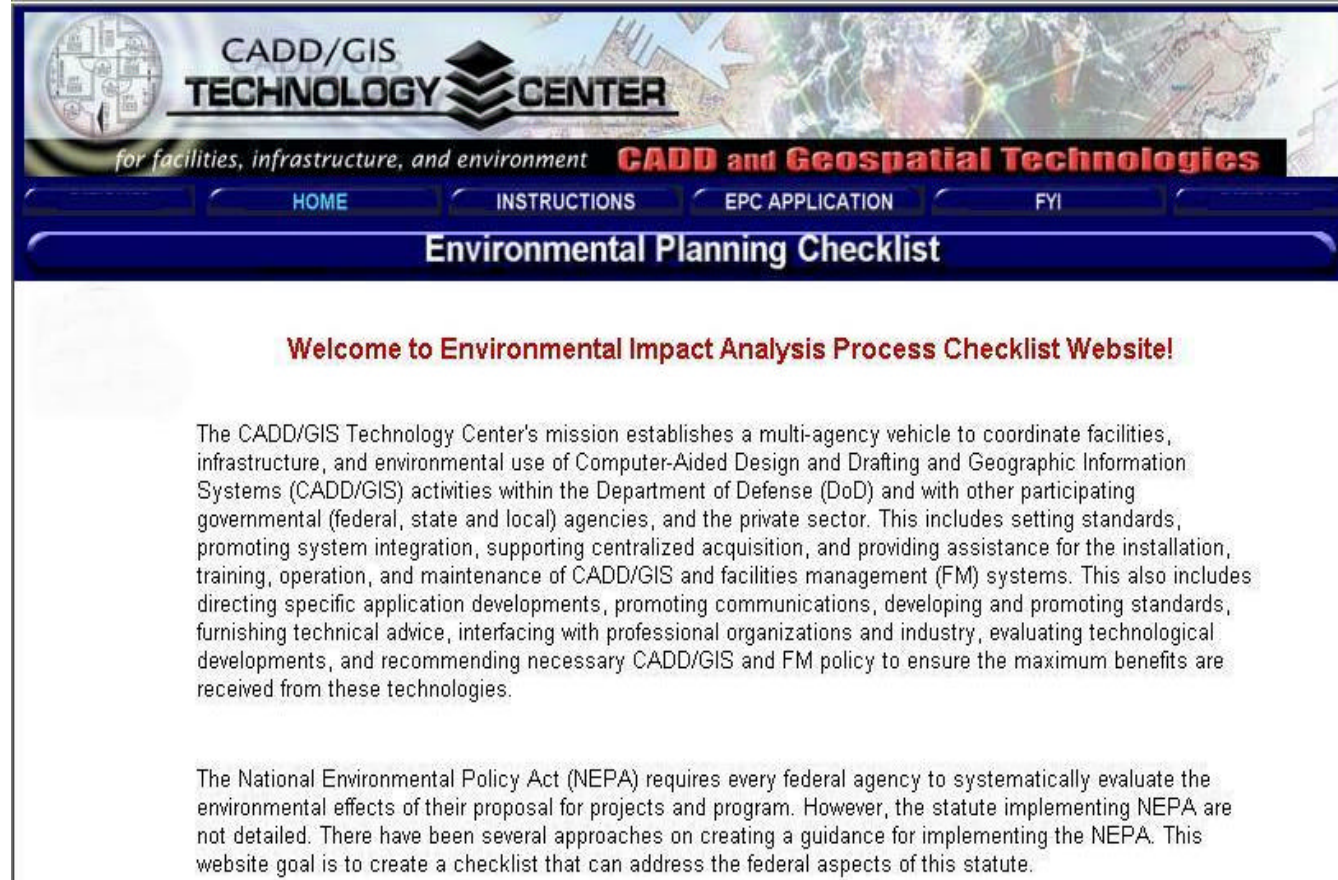
Section No.	Section Theme	No. of Questions
25	Socioeconomics	3
26	Traffic	1
27	Environmental Justice	1

# 01.040 – Use of GIS to Simplify EIAP

- Web-based application requires installation on server with Microsoft Active Server Page (ASP) software.
- Can be accessed via Internet using Internet Explorer or Netscape browser. Requires download and installation of free Macromedia Shockwave Player plug-in.

## Project Website:

[http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01\\_040.htm](http://tsc.wes.army.mil/contacts/groups/FWG/Environmental/envprojects/01.040/01_040.htm)



# 01.040 – Use of GIS to Simplify EIAP



## Welcome to Environmental Impact Analysis Process Checklist Website!

The CADD/GIS Technology Center's mission establishes a multi-agency vehicle to coordinate facilities, infrastructure, and environmental use of Computer-Aided Design and Drafting and Geographic Information Systems (CADD/GIS) activities within the Department of Defense (DoD) and with other participating governmental (federal, state and local) agencies, and the private sector. This includes setting standards, promoting system integration, supporting centralized acquisition, and providing assistance for the installation, training, operation, and maintenance of CADD/GIS and facilities management (FM) systems. This also includes directing specific application developments, promoting communications, developing and promoting standards, furnishing technical advice, interfacing with professional organizations and industry, evaluating technological developments, and recommending necessary CADD/GIS and FM policy to ensure the maximum benefits are received from these technologies.

The National Environmental Policy Act (NEPA) requires every federal agency to systematically evaluate the environmental effects of their proposal for projects and program. However, the statute implementing NEPA are not detailed. There have been several approaches on creating a guidance for implementing the NEPA. This website goal is to create a checklist that can address the federal aspects of this statute.



# 01.040 – Use of GIS to Simplify EIAP

The screenshot shows a web application titled "Environmental Planning Checklist". At the top, there is a header banner with the CADD/GIS TECHNOLOGY CENTER logo and the text "CADD and Geospatial Technologies". Below the banner is a navigation bar with links: HOME, INSTRUCTIONS, EPC APPLICATION (highlighted), and FYI. The main content area has a title "Environmental Planning Checklist" and an "enter" button. The text describes the purpose of the Environmental Planning checklist (EPC) and lists three bullet points explaining its use. At the bottom, there is a URL: <http://tsc.wes.army.mil/eiap>.

**CADD/GIS TECHNOLOGY CENTER**  
*for facilities, infrastructure, and environment* **CADD and Geospatial Technologies**

HOME INSTRUCTIONS **EPC APPLICATION** FYI

**Environmental Planning Checklist**

enter

Environmental Planning checklist (EPC) was established to facilitate the accurate and consistent application of environmental compliance criteria to design, construction, repair, and maintenance of projects within a given installation.

- This tool will enable the user to properly and consistently apply environmental regulations to the decisions regarding planned design, construction, repair, and maintenance projects. This checklist should be used as a way to "screen" the proposed projects for environmental impacts, constraints, and permitting/consultation requirements.
- The Environmental Planning Checklist will guide the user through the questions to properly prepare for projects. Simply choose yes, no, or don't know in answer to each question. The Environmental Checklist will do the rest.
- The Environmental Planning Checklist will generate a list as questions are answered throughout the checklist. The user does not need to worry about keeping track of this on his/her own answers from the specific interview.

<http://tsc.wes.army.mil/eiap>

[List of Abbreviations \(PDF\)](#) / [List of Entity Types \(PDF\)](#)

# 01.040 – Use of GIS to Simplify EIAP

EPC Help - Microsoft Internet Explorer

## EIAP Checklist - HELP

Step 1: ENTER

**Step 2: PROJECT INFO**

Step 3: SESSION

New Session

Existing Session

Step 4: PROJECT INFO

New Session

Existing Session

Step 5: SECTIONS

Step 6: QUESTIONS

Step 7: REVIEW/EDIT

Step 8: END

A project name (1) and project title (2) are required. Any of the other information you enter will be stored with your session. Click on "Continue" to proceed (3).

Project Number:	<input type="text" value="my project number"/>	1
Project Title:	<input type="text" value="my project title"/>	2
Project Location:	<input type="text"/>	
Date:	<input type="text"/>	
Point of Contact (POC):	<input type="text"/>	
POC phone:	<input type="text"/>	
	<input type="button" value="Continue"/>	3

# 01.040 – Use of GIS to Simplify EIAP

EPC Help - Microsoft Internet Explorer

## EIAP Checklist - HELP

Step 1: ENTER  
Step 2: PROJECT INFO  
**Step 3: SESSION**  
New Session  
**Existing Session**  
Step 4: PROJECT INFO  
New Session  
Existing Session  
Step 5: SECTIONS  
Step 6: QUESTIONS  
Step 7: REVIEW/EDIT  
Step 8: END

If you want to open a saved or partially complete session use the menu box slider **(1)**, find the file name that you would like to load.

new session


File to load:

Files available:

.052103_TenMile - 6/12/2003 9:40:48 AM	1
.061103_LanderFork - 6/12/2003 9:40:48 AM	

load file

# 01.040 – Use of GIS to Simplify EIAP

**CADD/GIS  
TECHNOLOGY CENTER**  
*for facilities, infrastructure, and environment***CADD and Geospatial Technologies**

HOMEINSTRUCTIONS**EPC APPLICATION**FYI

**Environmental Planning Checklist**

**Environmental Planning Checklist**

This is the starting point for evaluating proposed actions for environmental assessment compliance. To evaluate your project, you will navigate through a matrix of questions in 27 sections. The matrix may require you to contact a point of contact within your division in order to complete the evaluation, so a complete evaluation may take some time. Please fill in the information below.

To:  Proponent:  Telephone No.:

Title of Proposed Action:

Purpose and need for action:

Description of Proposed Action and Alternatives:

Proponent Approval:  Date Approved:

Update Checklist

[List of Abbreviations \(PDF\)](#) / [List of Entity Types \(PDF\)](#)



# 01.040 – Use of GIS to Simplify EIAP

The screenshot shows the 'Environmental Planning Checklist' web application. At the top is the CADD/GIS Technology Center logo and navigation links: HOME, INSTRUCTIONS, EPC APPLICATION (highlighted), and FYI. Below the navigation is the title 'Environmental Planning Checklist'. The main content area is divided into two panels. The left panel is a sidebar with a list of 27 sections, grouped into five categories: CONSERVATION (1-7), COMPLIANCE (8-17), POLLUTION PREVENTION (18-20), RESTORATION (21-22), and OTHER (23-25). Each section is represented by a small colored square icon. The right panel has a title 'Environmental Planning Checklist' and contains instructions: '< Select a section from the list at left.', 'You may begin in any of the available 27 sections.', and 'As you proceed through the checklist, you will see the following symbols indicating your progress in each section:'. Below this is a legend with three items: 'Section not yet visited' (red square), 'Section partially completed' (yellow square), and 'Section completed' (grey square). At the bottom of the right panel is a warning icon and text: '< When you see this icon, place you mouse over the icon to see special instructions.'

**CADD/GIS TECHNOLOGY CENTER**  
*for facilities, infrastructure, and environment* **CADD and Geospatial Technologies**

HOME INSTRUCTIONS **EPC APPLICATION** FYI

**Environmental Planning Checklist**

**CONSERVATION**

- 1 Soil Disturbance
- 2 Critical Area and Coastal Zone
- 3 Historic Preservation
- 4 Endangered Species
- 5 Land Use
- 6 Tree Clearing
- 7 Bird/Aircraft Strikes
- 8 Deer Auto Collision
- 9 Aesthetics

**COMPLIANCE**

- 10 Storm Water and Wastewater
- 11 Pesticides
- 12 Hazardous Waste and Materials
- 13 Polychlorinated Biphenyls (PCB)
- 14 Air Quality (Emissions)
- 15 Drinking Water
- 16 Petroleum Systems
- 17 Oil Control
- 18 Groundwater Monitoring Wells
- 19 Asbestos
- 20 Lead

**POLLUTION PREVENTION**

- 21 Solid Waste and Recycling
- 22 Noise

**RESTORATION**

- 23 Capital Improvements
- 24 Installation Restoration

**OTHER**

- 25 Socioeconomics
- 26 Traffic
- 27 Environmental Justice

**Environmental Planning Checklist**

< Select a section from the list at left.

You may begin in any of the available 27 sections.


As you proceed through the checklist, you will see the following symbols indicating your progress in each section:

- Section not yet visited - [Red Square]
- Section partially completed - [Yellow Square]
- Section completed - [Grey Square]

! < When you see this icon, place you mouse over the icon to see special instructions.



# 01.040 – Use of GIS to Simplify EIAP


**CADD/GIS TECHNOLOGY CENTER**  
 for facilities, infrastructure, and environment **CADD and Geospatial Technologies**

[HOME](#)
[INSTRUCTIONS](#)
[EPC APPLICATION](#)
[FYI](#)

## Environmental Planning Checklist

**CONSERVATION**

- 1. Soil Disturbance
- 2. Critical Area and Coastal Zone
- 3. Historic Preservation
- 4. Endangered Species
- 5. Land Use
- 6. Tree Clearing
- 7. Bird/Aircraft Strikes
- 8. Deer Auto Collision
- 9. Aesthetics

**COMPLIANCE**

- 10. Storm Water and Wastewater
- 11. Pesticides
- 12. Hazardous Waste and Materials
- 13. Polychlorinated Biphenyls (PCB)
- 14. Air Quality (Emissions)
- 15. Drinking Water
- 16. Petroleum Systems
- 17. Oil Control
- 18. Groundwater Monitoring Wells
- 19. Asbestos
- 20. Lead

**POLLUTION PREVENTION**

- 21. Solid Waste and Recycling
- 22. Noise

**RESTORATION**

- 23. Capital Improvements
- 24. Installation Restoration

**OTHER**

- 25. Socioeconomics
- 26. Traffic
- 27. Environmental Justice

**Question**

33. Does the proposed project involve any actions located within 1,000 feet of any Federal Candidate, State watchlist, or other species or habitat enjoying a special designation assigned by Federal or state agencies?

User Comment (add a comment to be recorded with your answers):

**Entity Types**

**Question specific entity types**

flora\_special\_plant\_site  
 flora\_replanting\_site  
 fauna\_special\_habitat\_site  
 shoreline\_buffer\_critical\_area  
 preserve\_area


**Base map entity types**

installation\_area,  
 surface\_water\_course\_centerline,  
 road\_area, airfield\_surface\_site,  
 vehicle\_parking\_area,  
 vehicle\_driveway\_area,  
 structure\_existing\_site, shoreline

[Review/Edit Answers](#)
[Back 1](#)
[End Session](#)

[List of Abbreviations \(PDF\)](#) / [List of Entity Types \(PDF\)](#)

# 01.040 – Use of GIS to Simplify EIAP


**CADD/GIS  
TECHNOLOGY CENTER**  
 for facilities, infrastructure, and environment **CADD and Geospatial Technologies**

[HOME](#)
[INSTRUCTIONS](#)
[EPC APPLICATION](#)
[FYI](#)

## Environmental Planning Checklist

**Summary of Answers**
Checklist is - incomplete

**Project Information**  
 To:  Proponent:  Telephone No.:   
 Title of Proposed Action:   
 Purpose and Need for Action:  Description of Proposed Action and Alternatives:   
 Proponent Approval:  Date Approved:

Section	Question	Answer
1	Will the proposed project involve soil disturbing activities?	No
2	Is the proposed project located within areas designated by your state as part of the coastal zone?	No
3	Does the project involve alterations, maintenance, or repairs to an existing structure?	No
4	Contact your installation's natural resource manager.	Message
4	Does the proposed project involve any actions located within 1,000 feet of any Federal Candidate, State watchlist, or other species or habitat enjoying a special designation assigned by Federal or state agencies?	Yes
4	Have areas within 1,000 feet of the project site been surveyed within the last 10 years for threatened or endangered species or	Yes

[Back to Beginning](#)
[Print Summary](#)
[Do Not Know Summary](#)
[Entity Summary](#)
[Comment Summary](#)
[Save Progress](#)

[List of Abbreviations \(PDF\)](#) / [List of Entity Types \(PDF\)](#)



# 01.040 – Use of GIS to Simplify EIAP

Environmental Planning Checklist

**Summary of Required Entity Types**

*Checklist is - incomplete*

**Project Information**

To:  Proponent:  Telephone No.:

Title of Proposed Action:

Purpose and Need for Action:

Description of Proposed Action and Alternatives:

Proponent Approval:  Date Approved:

Section	Question	Entity Types
base map		installation_area, surface_water_course_centerline, road_area, airfield_surface_site, vehicle_parking_area, vehicle_driveway_area, structure_existing_site, shoreline
2	20	hydrobasin_storage_area, watershed_drainage_area, shoreline_buffer_nobuild_area, shoreline_buffer_critical_area, shoreline, floodway_area
3	24	structure_existing_site
4	33	flora_special_plant_site, flora_replanting_site, fauna_special_habitat_site, shoreline_buffer_critical_area, preserve_area
4	96	fauna_special_habitat_site, flora_special_plant_site, flora_replanting_site, shoreline_buffer_critical_area, preserve_area
15	65	chemical_waste_polluted_groundwater_area

Back to Beginning
Print Summary
Do Not Know Summary
Answer Summary
Comment Summary
Save Progress

[List of Abbreviations \(PDF\)](#) / [List of Entity Types \(PDF\)](#)

## QUESTIONS?

Bobby Carpenter

CADD/GIS Technology Center

*for facilities, infrastructure, and environment*

phone: 601-634-4572

E-mail: [Bobby.G.Carpenter@erdc.usace.army.mil](mailto:Bobby.G.Carpenter@erdc.usace.army.mil)

CADD GIS Technology Center Internet URL :

<http://tsc.wes.army.mil>